Maximizing Web Searches with Google

www.Google.com

The Google search engine is aptly named after the mathematical term, "googol," which is the number 10 raised to the power 100 (10^{100}) , written out as the numeral 1 followed by 100 zeros. Google has won dozens of awards and accolades for its superior capabilities. The home page has a very small file size, making it quick to load—even on a dial-up connection—and a simple interface, which makes it a very user-friendly search engine not bogged down by advertisements and other unwanted elements.



About Google

The Google home page, shown above, gives you direct access to five main features: Web, Images, Groups, Directory, and News. The default Web section is where you would perform a general Internet search. Other, more specific searches and special Google collections are outlined later in this document. The home page also has three special options: advanced search, preferences, and language tools.

Advanced Search. Most of Google's specific searches (i.e., images, news, etc.) have an advanced search option, and each one varies slightly. This option allows you to set some additional criteria, including languages, filtering of explicit material (SafeSearch), specification of filetype (perhaps you're looking for a PDF or an Excel spreadsheet rather than a web page), and date of publication.

Preferences. In this section, you can select from a few preferences that you would like Google to remember each time you use it on the same computer. You can:

- Select what language you would like Google tips and messages appear in (try Elmer Fudd, Klingon, or Bork! Bork! Bork—the Swedish Chef—for a laugh);
- Select what languages or countries of origin you would like to have included in your search results;
- Permanently turn on SafeSearch;
- Specify the number of search results you would like to appear on each page;
- and even ask Google to open all search results in a new browser window (very convenient if you find yourself clicking on many links to find just the right resource).

Language Tools. This page offers you a direct search of pages from a specific country or in a particular language, a text translator for Latinate languages, and a way to translate an entire webpage.

Visit <u>www.Google.com/about.html</u> for more information about Google in general, topics covered in this document, and much more!



Anatomy of a Search Result

When searching Google, there are two buttons to choose from to execute your search: "Google Search" and "I'm Feeling Lucky." The "Google Search" button will bring you up to 1,000 results based on your search terms, while the "I'm Feeling Lucky" button will take you directly to the first result on the list (usually the most often visited page based on your terms).

Following is an illustration of a Google search result (for a search performed for "LexisNexis") and what each facet of the result represents.

Page title → LexisNexis for law, public records, company data, government, ...

The first text to appear on the page → LexisNexis provides authoritative legal, news, public records and business information with legal, tax and regulatory publications in online, print or CD-ROM ...

A short description of the page → Description: Products and services for legal, business, academic, and government professionals, available by subscript...

This site's location in the Google Directory → Category: Society > Law > Products > Databases

Web address - file size - date → www.lexisnexis.com/ - 47k - Sep 9, 2003 - Cached - Similar pages

Notice that the search terms are bold in the result. On the bottom line, there are also two additional options: "Cached" and "Similar pages." Clicking "Cached" will simply give you an older version of the result page, which represents what the page looked like the last time the Google engine indexed the page. This service exists in case a website's server becomes unavailable. Clicking on "Similar pages" will give you a list of pages with similar content to that of the result. For example, the second item on the "Similar pages" list for the LexisNexis website is a link to the Westlaw website.

Specific Searches and Special Collections

Google Image Search

What it does: Executing a Google image search will result in images (GIF and JPG format only) that

reside on the Internet and match your search terms.

How to access it: Go to www.Google.com and select "Images" above the search box.

Google Groups

What it does: Google Groups is a directory of Usenet groups, or discussion forums, in which a user, once

registered, can participate in online discussions about everything from business and

parenting to politics and social issues.

How to access it: Go to www.Google.com and select "Groups" above the search box.

Google Directory

What it does: The Google Directory is a searchable subject index of web pages, much like Yahoo.

Basically, instead of searching the Internet, you can browse web sites by category.

How to access it: Go to www.Google.com and select "Directory" above the search box.



Google News

What it does: Google News contains a comprehensive assortment of current and relevant news stories

from various news sources, such as CNN.com, The Washington Post, the Associated Press,

and more. It's a great way to get your news from competing sources all on one page.

How to access it: Go to www.Google.com and select "News" above the search box.

Google Catalogs

What it does: Google Catalogs is a search engine designed to produce results from online mail-order

catalogs only.

How to access it: Go to www.Catalogs.Google.com.

Froogle

What it does: Froogle is a conglomeration of online shopping resources, and only contains search results

from websites that offers goods or services for purchase.

How to access it: Go to www.Froogle.com.

Google People

What it does: Google People is a special way to get biographical information about a particular person or

to find out who the person is or was that did a particular thing.

How to access it: Go to www.Google.com and use the Web search feature.

How to search: Simply type in the search box: "Who is" or "who was" and then enter the rest of your question. It

can be anything from "Who was John Jay?" to "Who was the first Chief Justice of the U.S. Supreme Court?" Note: Google has a particularly difficult time answering questions about who authored books of fiction. In addition, results will vary depending on what's out there. Asking "Who is/was" a particular individual will get more biographical information, while asking a more

vague question will simply give results that attempt to answer it.

Google Calculator

What it does: The Google Calculator does just that—it calculates mathematical formulas and converts

from one unit of measure to another. You can enter anything from "2+3" to "one liter in

cups."

How to access it: Go to www.Google.com and use the Web search feature.

How to search: Visit http://www.google.com/help/features.html#calculator details.

Google Labs

What it does: It's not a search engine, just a place where Google highlights its new and upcoming

technologies, and boy, are they busy!

How to access it: Go to http://labs.google.com.



Search Tips

Using Boolean Expressions. What is a Boolean Expression? Quite simply, it is a series of search terms that are connected by words like "and," "or," and "not." It's a great idea to use a Boolean expression when searching on Google or any other search engine because it will likely produce more accurate results. For example, if you want to look up information about the city of Rome, Georgia and not Rome, Italy, your search might look something like:



Similarly, you can use parenthesis and a dash (minus sign="not") to write the same Boolean expression.



Quotation marks can also be useful. Generally, quotation marks around single words don't produce more accurate results, but quotation marks around phrases can. This tells the search engine to search for instances of the two (or more) words in the phrase in the exact way they appear within the quotation marks. Another way to search for Rome, Georgia is:



One of the best uses for quotation marks is searching for people. If you search for John Jay, it's likely that you will get results relating to our first U.S. Supreme Court Chief Justice. However, because there are an exhausting number of lists of people on the web, you might also get results that include in their text both the names John and Jay, but not necessarily together or in that order. Searching for "John Jay" will help to narrow your results. Of course, Google is so powerful that sometimes you don't need the quotation marks to narrow your results. It's all trial and error.

Google Syntaxes

At Google, a syntax is simply a specialized term that, when properly used, can search for your terms within a specific part of a webpage, produce a particular file type, or search only a special collection or specific types of webpages. Google's syntaxes along with their definitions are:

intitle: / *allintitle: Combining these with search terms will search only for text within the titles of webpages. inurl: / *allinurl:

Combining these with search terms will search only for text within the web address (URL)

of webpages.

intext: / *allintext: Combining these with search terms will search only for text within the text of webpages.

Combining this with search terms will search only for hyperlinked text within webpages. inanchor: Combining this with a web address (URL, i.e., www.in.gov) will search only within the site:

specified site. Additionally, use "site:edu" or "site:gov" to search only within webpages

with these extensions (as opposed to .com or .org).

Combining this with a web address (URL) will search only for webpages that link to the *link:

specified site.

cache: Combining this with a web address (URL) will result in the last indexed version of the

specified site (which could be several days, weeks, or months old).



filetype: Combining this with a particular filename extension (i.e., xls for Excel, doc for Word, ppt

for PowerPoint) will search only for files of the specified type.

related: Combining this with a web address will produce pages that are similar to the specified

site.

info: Combining this with a web address will produce a link to the website, a link to the cached

version of the site, a link to related pages, a link to a list of pages that link to the site, and

webpages that contain the web address.

*phonebook: Combining this with search terms will provide a list of phone listings for those terms.

Enter "Snyder IN" for a list of Snyders in Indiana. Enter "Kurt Snyder" to find listings for

all Kurt Snyders. Enter a phone number and it will do a reverse lookup. Use

rphonebook: to search only residential listings and bphonebook to search only business

listings.

daterange: Combining this with a beginning and ending date in Julian format will produce results

published only within those dates. For more information about Julian dates and online

converter, visit http://aa.usno.navy.mil/data/docs/JulianDate.html.

Some syntaxes can be used in conjunction with one another. Some cannot. Those that can't are denoted above with an * and are called Antisocial Syntaxes. Google's Advanced Search feature does not support the mixing of syntaxes or the use of the "site" syntax when used to search specific types of websites (as opposed to a specific site). By far, the most useful syntaxes are: "inanchor," "site," "link," "filetype," "info," and "phonebook."

Using syntaxes. Following are some examples of how to use the syntaxes above. To search for...

George Bush only on the CNN website, enter: "George W. Bush" site:www.cnn.com

- Webpages that link to www.in.gov, enter: link:www.in.gov
- Nanotechnology only at educational websites, enter: nanotechnology site:edu
- An Excel spreadsheet budget template, enter: "budget template" filetype:xls
- A phone number for J. Arnold in Ohio, enter: rphonebook: J Arnold OH

To learn more about syntaxes, try doing a web search for "google syntaxes" at www.Google.com.

Searching by Date

Unfortunately, the daterange syntax is somewhat tricky, because it requires the use of the Julian date format. However, if you need current information, you should use the Advanced search feature, where you can specify that you prefer results from: the past three months, the past six months, or the past year. You might also try including any or all of the following date formats with your search terms, but be careful—Google has a ten-word search term limit.

"May * 2003 | "May 2003 | 05/03 | 05/*/03

Note: Narrowing down to a specific date might prove self-defeating



Tips & Tricks

Getting around the Ten-Word limit:

- Use specific terms and favor obscurity.
- Use wild cards (*) in place of common words, but avoid using as first term. For example: if you want to search for "Do as I say but not as I do" you might enter: "Do as * say but not as * do."
 Note: do not use a wildcard in place of a letter within a word (e.g., D* as I s*y).
- Word order matters—you will get different results.

General:

- Google search terms are NOT case sensitive, but syntaxes ARE. This means that you can type: Indiana, indiana, iNDIANA, or INDiana, and Google will always recognize it as "indiana." However, don't use capitalization when using a syntax.
- Search Engine Results: max out at 1000; Phonebook results max out at 600.
- Searching for a medical/technical item: Narrow search to educational (.edu) sites (i.e., use syntax "site:edu"). This will avoid book lists and online stores.

